Energy Efficiency Question 22: *How has Michigan or other jurisdictions designed their efficiency standards to adapt to unforeseen circumstances, or proposed to do so? What methods beyond legislative changes have been considered or implemented?*

Executive Summary

1. There is significant uncertainty about the future costs and other impacts associated with implementing state Energy Optimization standards. It is prudent for the standards to be designed with flexibility to deal with this uncertainty and prevent unforeseen negative consequences.

2. Some jurisdictions, including Michigan, have established a cost limitation mechanism to protect ratepayers in case the compliance costs of the standards increase excessively beyond what was foreseen. Michigan's effective cost cap is in line with the national average.

3. Under Michigan's current law, there is NO mechanism to reduce the savings target when energy optimization plans indicate that the costs to customers would exceed a maximum set by the PA 295.

4. Under Michigan's current law, there is some administrative flexibility in the standard to help adapt to unforeseen circumstances.

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1. There is significant uncertainty about the future costs and other impacts associated with implementing state Energy Optimization Standards. It is prudent for the standards to be designed with flexibility to deal with this uncertainty and prevent unforeseen negative consequences.

Nationwide there has been significant variability in the magnitude of costs to meet the energy efficiency standards. In 2010, nearly every state spent money on, and produced some level of, electric energy efficiency. Chart 1 shows the results of energy spending, with the vertical axis representing spending as a percent of retail revenues and the horizontal axis representing the savings stated in percent of electric energy sales.

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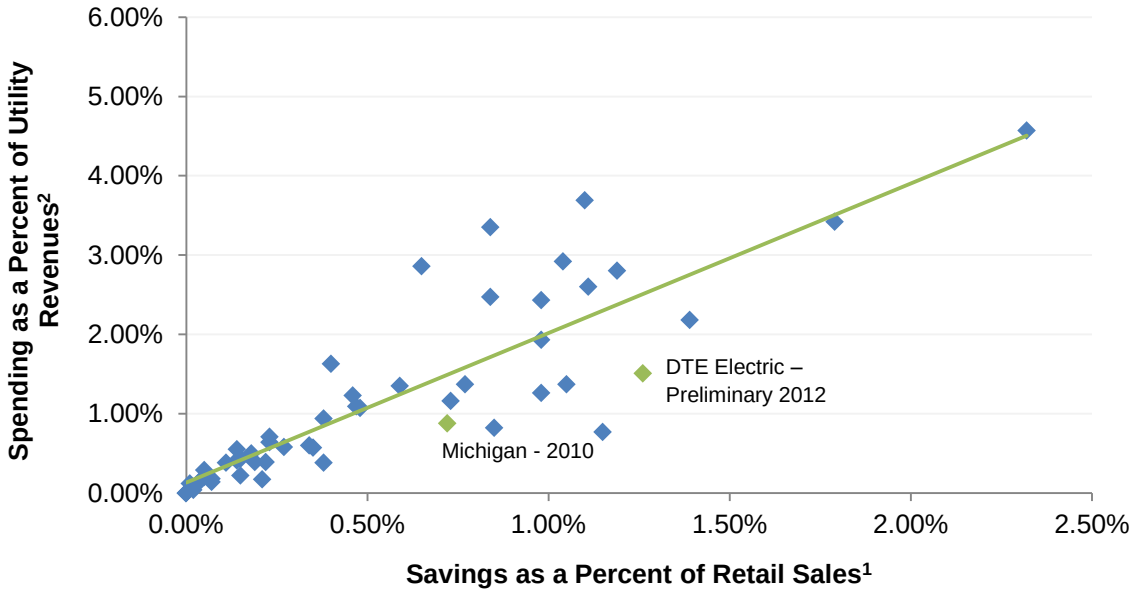


[1]*Source: The State Energy Efficiency Scorecard, Ben Foster, et al., American Council for an Energy-Efficient Economy, Oct 2012*
[2]*Source: The State Energy Efficiency Scorecard, Michael Sciortino, et al., American Council for an Energy-Efficient Economy, Oct 2011*

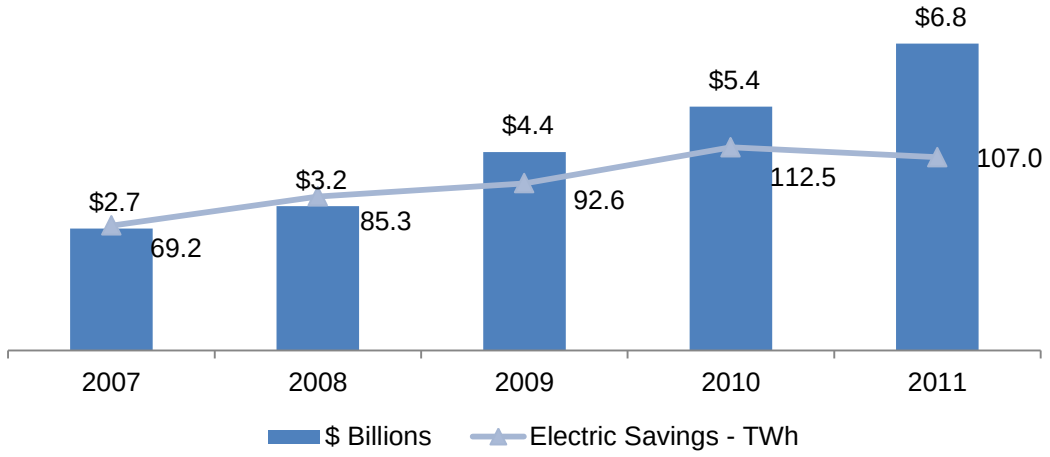
The slope of the line in Chart 1 is 1.9% and it intercepts very close to zero. This leads to the conclusion that in 2010, for each 1.0% of energy savings achieved, program costs averaged 1.9% of utility revenues. In Michigan, spending is capped at 2.0% of electric revenues with the energy efficiency standard set at 1.0% of sales, in line with the national average. Michigan 2010 and DTE Electric Preliminary 2012 results are shown as green dots below the line in Chart 1, indicating a relative lower spend per MWh saved. However, 2010 was only the second year of Michigan's energy optimization programs and costs are increasing over time as the market matures both in Michigan and across the nation.

Chart 1 also demonstrates that as savings rise, so does spending. But the scatter in the center of the chart highlights the variability, with some states spending 4% of utility revenue to achieve 1% savings and others spending less than 1% to achieve 1% savings.

Moreover, there is <u>substantial uncertainty on the compliance costs moving forward.</u> The national experience has been that spending on energy efficiency is increasing at a faster rate than energy savings achieved. Chart 2 shows a comparison of U.S. electric efficiency budgeted spending versus electric savings. U.S. electric savings have

increased by 12% per year on average, while budgeted spending has increased by 26% per year on average. In results, budgeted spending per MWh of saving has increased by 13% per year over the five years.

Chart 2 - U.S. Electric Efficiency Budgeted Spending vs. Electric Savings[3]



[3]Source: *Summary of Ratepayer-Funded Electric Efficiency Impacts, Budgets, and Expenditures*, Adam Cooper and Lisa Wood, Institute For Electric Efficiency, January 2012; *Summary of Customer-Funded Electric Efficiency Savings, Expenditures, and Budgets (2011-2012), IEEE Issue Brief, March 2013*

Given this uncertainty, it is prudent to develop standards that have a high degree of flexibility to deal with unforeseen circumstances and prevent unintended consequences.

2. Some jurisdictions, including Michigan, have established a cost limitation mechanism to protect ratepayers in case the compliance costs of the standards increase excessively beyond what was foreseen. Michigan's effective cost cap is in line with the national average.

Cost caps exist in Illinois, Michigan, Wisconsin and Pennsylvania and range from 1.2% to 2.015% of utility revenues.

- Illinois limits spending on energy efficiency programs to 2.015% of utility revenues as outlined in Public Act 96-0033
- Wisconsin mandates that utilities provide 1.2% of revenues to the state run program "Focus on Energy" through the 2005 Wisconsin Act 141
- Pennsylvania limits spending on energy efficiency programs to 2% of 2006 utility revenues as outlined in Public Act 129 of 2008

- Michigan: Per Public Act 295, there are two types of caps established. The first cap limits overall program spending to 2% of electric or gas revenues, but utilities can request higher funding levels from the Commission. The second cap limits customer class cost recovery (what the customer pays for) to 2.2% of utility revenues for residential and commercial customers and 1.7% of utility revenues for large customers. These two together allow Michigan utilities to exceed program spending caps in a particular year, but limit overall cost recovery of the plan to the recovery caps over a multi-year plan.

Three states provide "off ramps" to the Energy Efficiency Resource Standards (EERS) in case the utilities and providers cannot meet the standards as originally set. Statutes that oversee energy efficiency policy in two of the states clearly enable the regulatory commissions to adjust goals as needed.

- In Ohio, Section 4928.66 (A)(2)(b) provides the Ohio commission the authority to "amend the benchmarks" as needed if a utility cannot meet the standards as they are defined in the law.
- In New Mexico, Section 62-17-5 (H) provides utilities the ability to appeal to the commission when the standards cannot be met in their territory and provides the commission the authority to adjust the standards for that utility.
- Energy Trust of Oregon runs the energy efficiency programs for the state of Oregon. In its 2009 strategic plan, the Energy Trust states that "Integrated resource plans are not rate proposals, and, it takes rate proposals to fund these programs above a base level." Thus, the ultimate size and scope of energy efficiency is dependent on regulatory outcomes of individual utility filings.

Some states look at energy efficiency on its own merits periodically before specific utility or provider plans are put into place. The EERS is treated as an overarching goal, but achievement of that goal is attained in steps of three to five-year plans presented by utilities or providers. An example is MidAmerican's energy efficiency plan in Iowa. A primary input to their proposed 2014-2018 energy efficiency plan was a statewide potential study that estimated the energy efficiency potential economically available for the state of Iowa from 2014-2023. The five-year goals were stated showing year over year declining values on a percentage basis, starting at 1.14% in 2014 and declining to 0.92% by 2018 for electric and starting at 0.8% in 2014 and declining to 0.75% for gas. More importantly, MidAmerican stated its overall goal of achieving 47% of economic electric potential and 28% of economic gas potential in the five year plan.[1] This kind of

[1] Direct Testimony of Charles B. Rea, MidAmerican Energy, Docket No. EEP-2012-0002, February 1, 2013

flexibility in planning enables MidAmerican to design program plans in ways that are realistic, yet yield significant impact over time.

3. Under Michigan's current law, there is NO mechanism to reduce the savings target when energy optimization plans indicate that the costs to customers would exceed a maximum set by PA 295.

Michigan has established customer cost recovery caps for different customer classes. Energy Optimization providers are required to meet standards without exceeding those cost caps. Most states have binding standards like Michigan but some do have cost caps and off ramps that improve the flexibility of the programs significantly. Michigan law does allow utilities to spend more than the spending caps with approval from Michigan Public Service Commission, but there is no mechanism to exceed the customer class recovery caps.

4. Under Michigan's current law, there is some administrative flexibility in the standard to help adapt to unforeseen circumstances.

A number of provisions in PA 295 allow some flexibility in executing energy efficiency plans. They are summarized below:

- Energy savings in one year can be rolled forward to the next year, fulfilling up to one third of the subsequent year's goals, but the utility must forgo its financial incentive if it chooses to do so
- A utility or a provider can submit a plan that exceeds the 2% cost cap and receive commission approval if the plan is prudent
- The commission can adjust small utility savings goals and approaches
- The commission can end a program that does not meet the basic cost effectiveness requirements

In addition, the commission has ruled in favor of the following components of flexibility through past plan fillings:

- A utility can redirect up to 30% of program funds to programs that need additional funding (U-15806 and U-15890)
- A utility can develop new programs and launch them through "emerging programs" process (U-17049 and U-17050)
- A utility can roll forward unspent funds from one year to the next as long as the overall plan is under the spending cap (U-17049 and U-17050)

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All of these tools provide the flexibility to adjust course within an energy optimization plan, but they do not address a fundamental issue that could arise over time. This issue is that the cost of energy efficiency programs needs to realistically align with the state's energy efficiency goals.